

10/814,826 10/31/2008

=> s methionine

96237 METHIONINE  
554 METHIONINES

L1 96430 METHIONINE  
(METHIONINE OR METHIONINES)

=> s peroxide

236997 PEROXIDE  
49580 PEROXIDES

L2 256595 PEROXIDE  
(PEROXIDE OR PEROXIDES)

=> s PVP or polyvinylpyrrolidone or (poly vinylpyrrolidone) or (polyvinyl pyrrolidone) or (poly vinyl pyrrolidone)

15020 PVP  
45 PVPS  
15040 PVP

(PVP OR PVPS)

19846 POLYVINYLPIRROLIDONE  
107 POLYVINYLPIRROLIDONES  
19890 POLYVINYLPIRROLIDONE

(POLYVINYLPIRROLIDONE OR POLYVINYLPIRROLIDONES)

752990 POLY  
2 POLIES

752991 POLY  
(POLY OR POLIES)

17412 VINYLPIRROLIDONE  
63 VINYLPIRROLIDONES  
17437 VINYLPIRROLIDONE

(VINYLPIRROLIDONE OR VINYLPIRROLIDONES)

8160 POLY VINYLPIRROLIDONE  
(POLY(W)VINYLPIRROLIDONE)

108917 POLYVINYL  
176 POLYVINYLS

109039 POLYVINYL  
(POLYVINYL OR POLYVINYLS)

26126 PYRROLIDONE  
775 PYRROLIDONES

26372 PYRROLIDONE  
(PYRROLIDONE OR PYRROLIDONES)

3529 POLYVINYL PYRROLIDONE  
(POLYVINYL(W)PYRROLIDONE)

752990 POLY  
2 POLIES

752991 POLY  
(POLY OR POLIES)

438187 VINYL  
607 VINYLS

438363 VINYL  
(VINYL OR VINYLS)

26126 PYRROLIDONE  
775 PYRROLIDONES

26372 PYRROLIDONE  
(PYRROLIDONE OR PYRROLIDONES)

2218 POLY VINYL PYRROLIDONE  
(POLY(W)VINYL(W)PYRROLIDONE)

L3 38278 PVP OR POLYVINYLPIRROLIDONE OR (POLY VINYLPIRROLIDONE) OR (POLYV  
INYL PYRROLIDONE) OR (POLY VINYL PYRROLIDONE)

10/814,826 10/31/2008

=> s 11 and 12 and 13

L4 11 L1 AND L2 AND L3

=> d ti 1-11

L4 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Pharmaceutical and cosmetic foams containing PEG and PEG derivatives and solvents and gelling agents

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Poly-vinylpyrrolidone electrospun composites and bio-composite sensing materials

L4 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Luminol chemiluminescence catalysed by colloidal platinum nanoparticles

L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Self-decontaminating surface coatings comprising polymer

L4 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Vinylpyrrolidone polymer aqueous solutions and their manufacture

L4 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Foamable alcohol compositions, systems and methods of use

L4 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Nonaqueous single phase vehicles and formulations utilizing such vehicles

L4 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Electrospun enzyme-nanocomposite biosensor

L4 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Non-aqueous formulations containing biodegradable polymers and methionine and solvents for removing peroxides and reducing the oxidative degradation of drugs

L4 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Monitoring of sterilant apparatus and method for monitoring sterilant

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

TI Monitoring of sterilant apparatus and method for monitoring sterilant

=> d ibib abs 9

L4 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1310054 CAPLUS <<LOGINID::20081030>>

DOCUMENT NUMBER: 144:57512

TITLE: Non-aqueous formulations containing biodegradable polymers and methionine and solvents for removing peroxides and reducing the oxidative degradation of drugs

INVENTOR(S): Fereira, Pamela J.; Desjardin, Michael A.; Rohloff, Catherine M.; Berry, Stephen A.; Zlatkova-Karaslavova, Ekaterina S.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 36 pp., Cont.-in-part of U.S. Ser. No. 814,826.

10/814,826 10/31/2008

CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

| PATENT NO.             | KIND   | DATE     | APPLICATION NO. | DATE        |
|------------------------|--|----------|-----------------|-------------|
| US 20050276856         | A1   | 20051215 | US 2005-183477  | 20050718    |
| US 20050008661         | A1   | 20050113 | US 2004-814826  | 20040331    |
| WO 2006083950          | A2   | 20060810 | WO 2006-US3524  | 20060201    |
| WO 2006083950          | A3   | 20061123 |                 |             |
| W:                     | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |             |
| RW:                    | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM   |          |                 |             |
| AU 2006210560          | A1   | 20060810 | AU 2006-210560  | 20060203    |
| CA 2596860             | A1   | 20060810 | CA 2006-2596860 | 20060203    |
| WO 2006084140          | A2   | 20060810 | WO 2006-US3858  | 20060203    |
| WO 2006084140          | A3   | 20070111 |                 |             |
| W:                     | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |             |
| RW:                    | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM   |          |                 |             |
| EP 1843747             | A2   | 20071017 | EP 2006-720234  | 20060203    |
| R:                     | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU   |          |                 |             |
| JP 2008528699          | T  | 20080731 | JP 2007-554244  | 20060203    |
| NO 2007004476          | A  | 20071102 | NO 2007-4476    | 20070903    |
| PRIORITY APPLN. INFO.: |  |          | US 2003-459300P | P 20030331  |
|                        |  |          | US 2004-814826  | A2 20040331 |
|                        |  |          | US 2005-650252P | P 20050203  |
|                        |  |          | US 2005-183477  | A 20050718  |
|                        |  |          | WO 2006-US3858  | W 20060203  |

AB The present invention is related to materials and methods for forming polymeric delivery vehicles that reduces risk of oxidative degradation of a carried drug and the resulting compns. For example, stability of  $\omega$ -IFN was improved by adding L- methionine into PVP to remove peroxides.

=> d ibib abs 5

10/814,826 10/31/2008

L4 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2008 ACS on STN  
ACCESSION NUMBER: 2007:193693 CAPLUS <<LOGINID::20081030>>  
DOCUMENT NUMBER: 146:230149  
TITLE: Vinylpyrrolidone polymer aqueous solutions and their  
manufacture  
INVENTOR(S): Miyai, Takashi; Nakajima, Mitsuru  
PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 16pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| -----         | ---  | -----    | -----           | -----    |
| JP 2007045853 | A    | 20070222 | JP 2005-228563  | 20050805 |

PRIORITY APPLN. INFO.: JP 2005-228563 20050805  
AB In manufacture of vinylpyrrolidone polymer aqueous solns. by steps containing polymerization of N-vinylpyrrolidone (I)-based monomers in aqueous media in the presence of H2O2, metal catalysts, and ammonia, singlet O quenchers are allowed to exist in the reaction system in the polymerization step. Alternatively, nonvolatile organic bases are added to the polymer aqueous solns. Title solns. contain  $\leq 2000$  ppm HCO2H and do not contain organic polymerization initiators and/or their decomposed products. Storage of aqueous solns. containing vinylpyrrolidone polymers, HCO2H, and ammonia by the use of singlet O quenchers, and vinylpyrrolidone polymers, useful for cosmetics, pharmaceuticals, dispersing agents, and additives in filter manufacture, prepared by heat-drying the aqueous solns., are also claimed. Thus, 450 parts I was polymerized in H2O containing Cu sulfate 0.00023, methionine 4.5, 25% NH4OH 3.6, and 30% H2O2 19.2 parts to give a 50% aqueous polyvinylpyrrolidone solution containing 1100 ppm HCO2H and 2000 ppm ammonia. The solution was dried at 150° to give polyvinylpyrrolidone without gelation.

d his

(FILE 'HOME' ENTERED AT 15:37:07 ON 30 OCT 2008)

FILE 'CAPLUS' ENTERED AT 15:37:20 ON 30 OCT 2008

L1 96430 S METHIONINE  
L2 256595 S PEROXIDE  
L3 38278 S PVP OR POLYVINYLPIRROLIDONE OR (POLY VINYLPIRROLIDONE) OR (PO  
L4 11 S L1 AND L2 AND L3  
L5 8500 S PEROXIDE (3A) (VALUE OR LEVEL)  
L6 96430 S METHIONINE  
L7 69 S L5(L) L6  
L8 1636762 S POLYMER  
L9 0 S L7 AND L8  
L10 51 S L7 AND PY<2004

=> s l3 (L) l5

L11 2 L3 (L) L5

=> d ibib abs

10/814,826 10/31/2008

L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:742417 CAPLUS <<LOGINID::20081030>>

DOCUMENT NUMBER: 132:69146

TITLE: Developing an injectable formula containing an oxygen-sensitive drug: a case study of danofloxacin injectable

AUTHOR(S): Kasraian, Kasra; Kuzniar, Anna A.; Wilson, Gabrielle G.; Wood, Julia A.

CORPORATE SOURCE: Pfizer Central Research, Groton, CT, 06340, USA  
SOURCE: Pharmaceutical Development and Technology (1999), 4(4), 475-480

CODEN: PDTEFS; ISSN: 1083-7450

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review with 10 refs. The purpose of this study was to assess the impact of impurities in formulation components, antioxidants, formulation pH, and processing/packaging on the extent of color change associated with oxidation of danofloxacin injectable. The methods used in this study include reversed-phase HPLC, UV/VIS spectrophotometry, atomic absorption spectroscopy, visual observation, and iodometric titration for quantification of the antioxidant. The results from this study revealed that trace impurities from 2 different excipients significantly contributed to color change associated with oxidation PVP introduced trace levels of peroxides into the solution A second excipient also had a significant impact on stability because it introduced trace metal impurities into the product. The minimization of oxygen levels alone in the solution and headspace was not sufficient to completely eliminate the product instability. The addition of an antioxidant, monothioglycerol (MTG), resulted in a formulation less sensitive to processing variables. The impact of pH on the performance of MTG was also studied. At pH 7.5, MTG resulted in significant improvement in stability; however, at pH 6.0 it was not effective as an antioxidant. Process modifications alone may not be sufficient to prevent oxidation Chemical approaches, such as pH control, addition of an antioxidant, and control of components should be considered first as means of enhancing stability of oxygen-sensitive solns.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs 2

L11 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:400898 CAPLUS <<LOGINID::20081030>>

DOCUMENT NUMBER: 85:898

ORIGINAL REFERENCE NO.: 85:163a,166a

TITLE: Effect of silica on lipid peroxidation in the red cells

AUTHOR(S): Gabor, Silvia; Anca, Zoe

CORPORATE SOURCE: Inst. Public Health Med. Res., Cluj, Rom.

SOURCE: Internationales Archiv fuer Arbeitsmedizin (1974), 32(4), 327-32

CODEN: IAANBS; ISSN: 0020-5923

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Five varieties of silica [7631-86-9] dust induced a significantly higher level of lipid peroxides in erythrocytes in vitro than was found in control samples. The hemolysis produced by silica dusts was associated with the formation of an appreciable amount of malonaldehyde,

indicating peroxidative cleavage of the polyunsatd. fatty acids. Pretreatment of the dusts with polyvinylpyridine N-oxide (PVP N-oxide) [9045-81-2] prevented any enhancement of lipid peroxidase [9003-99-0] activity. PVP N-oxide may act as a radical-trapping agent, blocking at the quartz surface the putative free radicals involved in the initiation of lipid peroxidn. induced by the dusts. The results obtained suggest that lipid peroxidn. of membrane-bound polyunsatd. fatty acids may be involved in the cytotoxic activity of silica dust. The damaging effect of silica dust on cells is discussed in the light of the theory of electron catalysis and in terms of damage to membranes by free radicals.